

WE CLAIM:

1. A composition for intradermal injection that includes a pain-reducing agent selected from the group consisting of pharmaceutically acceptable preservatives, antimicrobials, disinfectants, and antioxidants.
2. The composition of claim 1 wherein the agent is selected from the group consisting of benzylic compounds.
3. The composition of claim 2 wherein the agent is a benzylic alcohol or benzylic acid.
4. The composition of claim 3 wherein the agent is benzyl alcohol.
5. The composition of claim 1 wherein the agent is a phenolic agent.
6. The composition of claim 5 wherein the agent is a phenolic alcohol, phenolic acid or paraben.
7. The composition of claim 1 wherein the agent is cresol.
8. The composition of claim 1 wherein the agent comprises an aromatic ring structure.
9. The composition of claim 1 wherein the agent is an organic alcohol.
10. The composition of claim 1 wherein the agent is a quinone.
11. The composition of claim 2 wherein the agent is present in a concentration of <1%.
12. The composition of claim 1 that comprises a pharmaceutical agent selected from the group consisting of insulin, heparin, low molecular weight heparin, triptan antimigraine compounds, and COX-2 inhibitors.
13. A method of reducing pain during intradermal injection of a composition, comprising including in said composition a pain-reducing agent selected from the group consisting of pharmaceutically acceptable preservatives, antimicrobials, disinfectants, and antioxidants.
14. The method of claim 13 wherein the agent is selected from the group consisting of benzylic compounds.
15. The method of claim 14 wherein the agent is a benzylic alcohol or benzylic acid.
16. The method of claim 15 wherein the agent is benzyl alcohol.
17. The method of claim 13 wherein the agent is a phenolic agent.
18. The method of claim 17 wherein the agent is a phenolic alcohol, phenolic acid or paraben.
19. The method of claim 13 wherein the agent is cresol.
20. The method of claim 13 wherein the agent comprises an aromatic ring structure.

21. The method of claim 13 wherein the agent is an organic alcohol.
22. The method of claim 13 wherein the agent is a quinone.
23. The method of claim 13 wherein the agent is present in a concentration of <1%.
24. The method of claim 13 that wherein the agent is selected from the group consisting of insulin, heparin, low molecular weight heparin, triptan antimigraine compounds, and COX-2 inhibitors.
25. The method of claim 13 wherein the intradermal injection is a bolus injection.
26. The method of claim 25 wherein the bolus injection is administered in a volume of greater than 100ul per needle.
27. The method of claim 26 wherein the bolus injection is administered in a volume equal to or greater than 100ul per needle.
28. The method of claim 27 wherein the bolus injection is administered in a volume equal to or greater than 200ul per needle.
29. The method of claim 28 wherein the bolus injection is administered in a volume equal to or greater than 250ul per needle.
30. The method of claim 29 wherein the bolus injection is administered in a volume equal to or greater than 500ul per needle.
31. In a method comprising the intradermal injection of a composition into the skin of a mammal, the improvement comprising the inclusion in said composition of a pain reducing agent selected from the group consisting of pharmaceutically acceptable preservatives.
32. The method of claim 31 wherein the agent is selected from the group consisting of benzylic compounds.
33. The method of claim 32 wherein the agent is a benzylic alcohol or benzylic acid.
34. The method of claim 33 wherein the agent is benzyl alcohol.
35. The method of claim 31 wherein the agent is a phenolic agent.
36. The method of claim 35 wherein the agent is a phenolic alcohol, phenolic acid or paraben.
37. The method of claim 31 wherein the agent is cresol.
38. The method of claim 31 wherein the agent comprises an aromatic ring structure.
39. The method of claim 31 wherein the agent is an organic alcohol.

40. The method of claim 31 wherein the agent is a quinone.
41. The method of claim 31 wherein the agent is present in a concentration of <1%.
42. The method of claim 31 that wherein the agent is selected from the group consisting of insulin, heparin, low molecular weight heparin, triptan antimigraine compounds, and COX-2 inhibitors.
43. The method of claim 31 wherein the intradermal injection is a bolus injection.
44. The method of claim 43 wherein the bolus injection is administered in a volume of greater than 100ul per needle.
45. The method of claim 44 wherein the bolus injection is administered in a volume equal to or greater than 100ul per needle.
46. The method of claim 45 wherein the bolus injection is administered in a volume equal to or greater than 200ul per needle.
47. The method of claim 46 wherein the bolus injection is administered in a volume equal to or greater than 250ul per needle.
48. The method of claim 47 wherein the bolus injection is administered in a volume equal to or greater than 500ul per needle.
49. The method of claim 13 wherein the composition is administered for a therapeutic, diagnostic or prognostic purpose.
50. The method of claim 31 wherein the composition is administered for a therapeutic, diagnostic or prognostic purpose.